

REMARKS

In response to the Office Action mailed March 28, 2001, Applicants respectfully request reconsideration. To further the prosecution of this application, the objections and rejections set forth in the Office Action have been considered, and each is responded to below. The application is believed to be in condition for allowance.

Claims 1-2, 8-26, 41-42, 45-48, 50-54, and 56-73 are pending in this application, of which 1, 41, 42, 45, 51, 66, and 68 are independent claims. In this amendment, claims 3-7, 27-40, 43-44, 49, and 55 are cancelled, claims 1-2, 8-10, 14-15, 19-23, 41-42, 45, and 50-51 are amended, and claims 58-73 are added.

I. Claims 1-45

In ¶2 of the Office Action, claims 1-45 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Number 5,420,482 (Phares). Applicants respectfully traverse this rejection.

According to the Office Action, "Phares essentially discloses the claimed invention but fails to disclose the light elements being LEDs". The Office Action asserts that it would have been obvious to one of ordinary skill in the art to use LEDs as the light elements in Phares in order to attain the advantages of reduced power consumption, simplicity, low cost, lengthened life, etc., based upon alleged general knowledge in the art. Thus, the rejection set forth in the Office Action is based, at least in part, on alleged common knowledge in the art, or "well-known" prior art pursuant to MPEP §2144.03, which would purportedly have motivated one of ordinary skill in the art to replace the light elements of Phares with LEDs. Applicants respectfully traverse the assertion that any prior art exists that would have provided motivation for such a modification. If the rejection of Applicants' claims 1-45 is to be maintained, the Examiner is respectfully requested to cite a reference in support of his position as required under MPEP §2144.03 or, if the Examiner is relying upon facts within his personal knowledge, to file an affidavit establishing those facts pursuant to §2144.03.

Further, Applicants respectfully assert that Phares fails to disclose or suggest additional features that are recited in each of Applicants' independent claims 1, 41, 42, and 45 as amended, and discussed below. Accordingly, Phares cannot render these claims obvious.

a. Claim 1

Claim 1, as amended, is directed to a method for attracting attention from an observer to a retail display. The method comprising acts of providing an LED system to generate light of a range of colors within a color spectrum, placing the LED system to affect the retail display with the light, and generating the light so as to illuminate the retail display.

Phares discloses a lighting system for use as decorative lighting such as Christmas lighting (Col. 7, lines 56-58), for use in display signs such as the "happy face" display of Figure 10 (Col. 8, lines 50-62), or for use in automotive lighting such as in a tail light assembly (Col. 9, lines 4-18). In each of these embodiments, the lighting system may itself illuminate, but is not designed to illuminate a retail display.

As conceded in the Office Action, Phares does not teach "an LED system". Furthermore, Phares does not teach "placing the LED system", nor any other lighting system, "to affect the retail display", as recited in claim 1 as amended. Thus, Phares fails to disclose or suggest all of the features recited in Applicants' independent claim 1. Accordingly, claim 1 patentably distinguishes over the cited reference, and the rejection of claim 1 under 35 U.S.C. §103(a) as being obvious over Phares should be withdrawn.

Claims 2, 8-21, and 23-26 depend from claim 1 and are allowable for at least the same reasons.

b. Claim 41

Claim 41, as amended, is directed to an apparatus comprising at least one LED; an addressable controller having an alterable address, the controller having a signal generator to generate control signals to control light emitted by the at least one LED; a receiver coupled to the addressable controller to receive data corresponding to the alterable address and indicative of the light to be emitted by the at least one LED; and a non-opaque container containing a non-opaque

liquid and arranged such that the non-opaque container is illuminated from the inside by the light generated by the at least one LED.

As conceded in the Office Action, Phares does not teach “an LED system”. Furthermore, Phares does not teach “a non-opaque container containing a non-opaque liquid and arranged such that the non-opaque container is illuminated from the inside”, as recited in claim 41. Thus, Phares fails to disclose or suggest all of the features recited in Applicants’ independent claim 41. Accordingly, claim 41 patentably distinguishes over the cited reference, and the rejection of claim 41 under 35 U.S.C. §103(a) as being obvious over Phares should be withdrawn.

c. Claim 42

Claim 42, as amended, is directed to an apparatus comprising a vending machine and an illumination system disposed within the vending machine for illuminating the vending machine. The illumination system comprises at least one LED; an addressable controller having an alterable address, the controller having a signal generator to generate control signals to control light emitted by the at least one LED; and a receiver coupled to the addressable controller to receive data corresponding to the alterable address and indicative of the light to be emitted by the at least one LED.

As conceded in the Office Action, Phares does not teach “at least one LED”. Furthermore, Phares does not teach “a vending machine” as recited in claim 42 as amended. Thus, Phares fails to disclose or suggest all of the features recited in Applicants’ independent claim 42. Accordingly, claim 42 patentably distinguishes over the cited reference, and the rejection of claim 42 under 35 U.S.C. §103(a) as being obvious over Phares should be withdrawn.

d. Claim 45

Claim 45, as amended, is directed to an article of clothing comprising an LED system including at least one LED, and a microprocessor that controls the at least one LED.

As conceded in the Office Action, Phares does not teach “an LED system”. Furthermore, Phares does not teach “an article of clothing comprising an LED system”, as recited in claim 45. Thus, Phares fails to disclose or suggest all of the features recited in Applicants’ independent

claim 45. Accordingly, claim 45 patentably distinguishes over the cited reference, and the rejection of claim 45 under 35 U.S.C. §103(a) as being obvious over Phares should be withdrawn.

Claims 46-48 and 50 depend from claim 45. Therefore, the rejection of claims 46-48 and 50 under 35 U.S.C. §103(a) as being obvious over Phares should be withdrawn for at least the same reasons.

II. Claims 45-50

In ¶3 of the Office Action, claims 45-50 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Number 5,912,653 (Fitch). This rejection is respectfully traversed.

According to the Office Action, “Fitch ... essentially discloses the claimed invention but fails to show an LED system”. The Office Action asserts that it was known that LCD systems had numerous advantages over LED systems, so that “degrading Fitch’s invention from using LCDs to LEDs such as described in the claimed invention is absolutely *not* considered as a novelty.”

Initially, it is respectfully asserted that the Office Action has failed to establish a *prima facie* case of obviousness with respect to claims 45-50. According to MPEP §706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. (emphasis added)

As the Office Action concedes, Fitch does not disclose an LED system. While the Office Action refers to two additional references, U.S. Patent No. 5,371,618 (Tai) and U.S. Patent No. 4,818,072 (Mohebban), the Office Action asserts that these references disclose “numerous advantages” of LCD systems over LED systems. Thus, not only does the Office Action not

identify a suggestion or motivation to modify Fitch to achieve the claimed invention, the Office Action indicates that Tai and Mohebban *teach away* from the proposed modification.

In addition to the foregoing, Applicants respectfully point out that it is not a requirement of the patent statute that a claimed invention be better or advantageous over the prior art. Rather, an invention is merely required to have utility, to be novel and to be non-obvious. An invention that is not taught or suggested by the prior art is non-obvious in view of that prior art, and the question of whether the invention is advantageous is simply irrelevant to a proper determination of patentability under §103. Thus, even if the Examiner were correct that an LED system would be inferior to Fitch's LCD system (a point on which Applicants do not agree), that would not render Applicants' claims obvious under §103, in view of the fact that the prior art of record is devoid of any teaching or suggestion to modify Fitch's system to achieve the Applicants' claimed invention. Furthermore, Applicants respectfully assert that the Examiner's assertion that providing an article of clothing with an LED system would be nothing more than "degrading Fitch's invention from using LCDs to LEDs" is factually incorrect. The LED system used in accordance with the embodiment of the present invention recited in claim 45 provides a number of advantages in generating lighting effects as compared to the LCD system disclosed in Fitch.

As conceded in the Office Action, Fitch does not teach "an LED system". Thus, Fitch fails to disclose or suggest all of the features recited in Applicants' independent claim 45. Accordingly, claim 45 patentably distinguishes over the cited reference, and the rejection of claim 45 under 35 U.S.C. §103(a) as being obvious over Fitch should be withdrawn.

Claims 46-48 and 50 depend from claim 45. Therefore, the rejection of claims 46-48 and 50 under 35 U.S.C. §103(a) as being obvious over Fitch should be withdrawn for at least the same reasons.

III. Claims 51-57

While it is indicated in the Office Action Summary that claims 1-57 are rejected, no rejection of claims 51-57, or supporting basis therefore, is set forth in the body of the Office Action. Accordingly, a proper rejection of claims 51-57 has not been presented. Claims 51-57 are believed to be allowable over the prior art of record.

IV. New Claims

Claims 58-73 are added to further define Applicants' contribution to the art.

New dependent claims 58-60, 61, 62, and 63-65 depend from claims 1, 41, 42, and 45, respectively, and are allowable for at least the same reasons.

Additionally, new independent method claims 66 and 68 are believed to be allowable. With respect to claim 64, the prior art of record does not disclose at least the recited act of positioning at least one object selected from the group consisting of a stencil and gobo between an LED system and a surface. With respect to claim 68, the prior art of record does not disclose at least the recited acts of providing an LED system to generate light of a range of colors and placing the LED system to affect an object with the light, the object being selected from the group consisting of a display case, a vending machine, a beverage container, and an advertising display. Dependent claims 67 and 69-73 depend from claims 66 and 68, respectively, and are believed to be allowable for at least the same reasons.

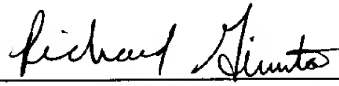
Conclusion

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to deposit account No. 23/2825.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the specification:**

The paragraph beginning at line 1 of page 3 has been amended as follows:

-- Computer lighting networks that use LEDs are also known. [U.S. Patent No. 5,420,482, issued to Phares, describes one such network that uses different colored LEDs to generate a selectable color, primarily for use in a display apparatus.] U.S. Patent No. 4,845,481, issued to Havel, is directed to a multicolored display device. Havel uses a pulse width modulated signal to provide current to respective LEDs at a particular duty cycle. U.S. Patent No. 5,184,114, issued to Brown, shows an LED display system. U.S. Patent No. 5,134,387, issued to Smith et al., is directed to an LED matrix display.--

In the claims:

Claims 3-7, 27-40, 43-44, 49, and 55 have been cancelled.

Claims 1-2, 8-10, 14-15, 19-23, 41-42, 45, and 50-51 have been amended as follows:

1. (Amended) A method for attracting attention from an observer to a retail display, the method comprising acts of:

providing an LED system to generate light of a range of colors within a color spectrum;
placing the LED system to affect [an object] the retail display with the light; and
generating the light so as to illuminate the [object] retail display.

2. (Amended) The method of claim 1, [wherein the] further including an act of [generating includes] providing a processor for controlling an amount of electrical current supplied to the LED system, so that a particular amount of current supplied thereto generates light of a corresponding color within the color spectrum.

8. (Amended) The method of claim 2, wherein the act of placing includes positioning the LED system to affect a non-opaque object within the retail display.

9. (Amended) The method of claim 8, wherein the [object] retail display is substantially transparent and comprises glass, ice, crystal, or plastic.

10. (Amended) The method of claim 8, wherein the act of placing includes positioning the LED system to affect a non-opaque container within the retail display, the non-opaque container containing a non-opaque substance.

14. (Amended) The method of claim 2, wherein the act of placing includes positioning the LED system to affect a displayment sign within the retail display.

15. (Amended) The method of claim 2, wherein the act of placing includes positioning the LED system to affect an informational board within the retail display.

19. (Amended) The method of claim 2, [wherein] further comprising an act of varying the color of the generated light [changes] over a period of time so that the [as to permit an] observer [to perceive] perceives a change in color of the [object] retail display being affected by the generated light.

20. (Amended) The method of claim 2, [wherein] further comprising an act of varying the color of the generated light [changes] over a period of time so that the [as to permit an] observer [to perceive] perceives an illusion of motion in a design on the [object] retail display being affected by the generated light.

21. (Amended) The method of claim 19 or 20, wherein the [object] retail display is at least one of a picture, photograph, image, displayment sign, informational board, or advertisement display.

22. (Amended) The method of claim 2, wherein the generated light changes color over a period of time so as to permit an observer to perceive an illusion of motion of the [object] retail display being affected by the generated light.

23. (Amended) The method of claim 19, 20, or 22, wherein the [object] retail display being affected by the light comprises at least one display used for advertising purposes.

41. (Twice Amended) An apparatus [A device for illuminating a container], comprising:
[a power terminal;
an] at least one LED [system coupled to the power terminal;
a current sink coupled to each LED, the current sink having inputs responsive to
activation signals];

an addressable controller having an alterable address, the controller [coupled to the inputs
and] having a signal generator to generate [the activation] control signals to control light emitted
by the at least one LED [for a predefined portion of timing cycles];

a receiver coupled to the addressable controller to receive data corresponding to the
alterable address and indicative of the [predefined portion of the timing cycles] light to be
emitted by the at least one LED; and

a non-opaque container containing a non-opaque [substance] liquid and arranged such
that the non-opaque container is illuminated from the inside by the light generated by the at least
one LED [system].

42. (Twice Amended) [A device for illuminating a vending machine] An apparatus,
comprising:

a vending machine and an illumination system disposed within the vending machine for
illuminating the vending machine, the illumination system comprising:

[a power terminal;
an] at least one LED [system coupled to the power terminal;
a current sink coupled to each LED, the current sink having inputs responsive to
activation signals];

an addressable controller having an alterable address, the controller [coupled to
the inputs and] having a signal generator to generate [the activation] control signals to
control light emitted by the at least one LED [for a predefined portion of timing cycles];
and

a receiver coupled to the addressable controller to receive data corresponding to the alterable address and indicative of the [predefined portion of the timing cycles] light to be emitted by the at least one LED[: and

a vending machine illuminated by the light generated by the LED system].

45. (Amended) An article of clothing comprising an LED system [controlled by] including at least one LED, and a microprocessor that controls the at least one LED [system].

50. (Amended) The article of clothing of claim 45, wherein the LED system is capable of displaying a programmable lighting effect [image].

51. (Amended) A method for illuminating [an object] a retail display, comprising acts of:

providing an LED system that generates light of a range of colors within a color spectrum in response to an activation signal;

directing the light toward [an object] the retail display; and

controlling the activation signal to vary the range of colors of the light over time, whereby the [object] retail display is affected with color-changing illumination.